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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,203	08/22/2005	Christopher Nutbeam	07812.0050-00	8623
22852	7590	07/21/2008		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER ABU ALI, SHUANGYI	
			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			07/21/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/511,203

**Applicant(s)**

NUTBEEM ET AL.

**Examiner**

SHUANGYI ABU ALI

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-69 is/are pending in the application.
- 4a) Of the above claim(s) 61-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date 10/14/04, 12/15/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 61-69 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Groups II-V. Applicants timely traversed the restriction (election) requirement in the reply filed on 04/14/2008.

Applicant's election with traverse of group I claims 15-60 in the reply filed on 04/14/2008 is acknowledged. The traversal is on the ground(s) that it is not a burden for the Examiner to examine all the claims and that claim 15 is not anticipated or obvious over WO 00/66510. This is not found persuasive because the Examiner respectfully submits that '510 discloses a composition comprising PCC such as aragonite and a kaolin composition having a shape factor of less than 25 and a steepness of greater than 38 (\*applicant are reminded that they have not presented clear reasons as to why the examiner judgment is wrong). The restriction is made based on PCT practice rule and thus any arguments based on a restriction for US practice are moot. Applicant presents no clear arguments as to why a restriction under the PCT rule is improper.

Finally and assuming further *arguendo* about the "serious burden" aspect, it is to be noted that all the groups are classified in different areas (i.e. pigment, coating, method of making a coating, method of making coated paper and paper, as claimed in each individual group, and requires a separate search in an individual art area) within the office thus a serious burden is apparent.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-43, 47-58 and 60 rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/66510.

Regarding claims 15-16, 28, 30, 41, and 51-52, '510 discloses a composition comprising PCC composition, such as aragonite or rhombohedral, and a kaolin composition, which has a shape factor of less than 25 and a steepness of greater than 38. (Page 5, 8 and 18)

The reference differs from Applicant's recitations of claims by not disclosing identical ranges. However, the reference discloses "overlapping" ranges, and overlapping ranges have been held to establish prima facie obviousness (MPEP 2144.05).

Regarding claims 17-21, and 31-34, '510 discloses the PCC composition having a median size of 0.2-0.8  $\mu\text{m}$  (page 9).

Regarding claims 22-25, and 29, '510 discloses that the rhombohedral PCC composition has at least 95% particles having a size of less than 2  $\mu\text{m}$ , at least 88% of particles having a size of less than 1  $\mu\text{m}$ , at least 66% of particles having a size of less

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than 0.5  $\mu\text{m}$  and at least 23-33% of particles having a size of less than 0.25  $\mu\text{m}$ .( page 16)

Regarding claims 26-27, and 39-40, '510 discloses the PCC composition has a brightness of at least 96( page 18) .

Regarding claims 35-38, and 42, 43 , '510 discloses that the aragonite PCC composition has at least 95% of particles with a size of less than 2  $\mu\text{m}$  , at least 82% of particles with a size less than 1  $\mu\text{m}$ , at least 66% of particles with a size less than 0.5  $\mu\text{m}$  and at least 22-33% of particles with a size less than 0.25  $\mu\text{m}$  ( page 15) .

Regarding claims 47-50, '510 discloses the kaolin composition having a median size in the range of 0.3-0.8  $\mu\text{m}$  (page 9).

Regarding claims 53-55, '510 discloses the kaolin composition having at least 95% of the kaolinite( page 13).

Regarding claims 56-57, '510 discloses the kaolin composition having a brightness of 90( page 17).

Regarding claims 58 and 60 , '510 discloses the composition comprising at least 40% of kaolin composition ( page 5).

Claims 44-46 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/66510, as applied above and further in view of U. S. Patent No. 5,833,747.

Regarding claims 44-46, '510 discloses a composition comprising a PCC composition, such as aragonite or rhombohedra, and a kaolin composition, which has a shape factor of less than 25 and a steepness of greater than 38. But they are silent

about the kaolin composition has a shape factor greater than 30 as applicant set forth in claims 44-46.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use a kaolin composition with a shape factor larger than 30, motivated by the fact that '510 does mention in the specification that platy kaolin, which has a aspect ratio of at least 30, ('747, col. 6, lines 1-3) can also be used with calcium carbonate to coat paper ('510, page 4) and thus the use of varying shape factors for the same purpose is clearly within the scope of the skilled artisan..

Regarding claim 59, '747 disclose that in PCC/kaolin mixtures, the mixture generally comprises 5-99% of calcium carbonate, thus making this amount obvious in the primary reference.

Claims 15, 30-37, 39-41, 44-46, 51-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,833,747, in view of WO 02/16511

Regarding claims 15, 30-37, 39-41, 44-46, 51-52 and 58-60, '747 discloses a composition comprising a PCC (aragonitic) composition and a kaolin (encompasses kaolinite) composition, where the PCC has a defined sizes. The Kaolin composition has a shape factor of larger than 30. But '747 is silent about the steepness factor of the kaolin and the GE brightness of the PCC and kaolin.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to choose the steepness factor as applicant set forth in the instant application, motivated by the fact that WO' 511 , also drawn to kaolin product ,

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disclose s that the combination of the defined values of steepness factor and shape factor give, in a paper made from the kaolin product, a beneficially enhanced combination of brightness and high porosity and thereby enhanced printability ( WO'511, page 8).

With respect to the GE brightness of the PCC and kaolin, since the same PCC and kaolin are used, this characteristic is expected absent evidence to the contrary.

Regarding claim 59, '747 disclose a pigment mixture comprising 5-99% of calcium carbonate.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-16, 28, 41, 44-46, and 51-52 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 44-47 and 50-51 of copending Application No. 10/538012. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are drawn to a composition comprising a kaolin composition and a calcium carbonate composition. The kaolin composition has a specific particle steepness and shape factor.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHUANGYI ABU ALI whose telephone number is (571)272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Marcheschi/  
Primary Examiner, Art Unit 1793

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